

## **ABSTRACT**

### **APPARATUS FOR CONSTRUCTING**

#### **A THIN FILM MIRROR**

Apparatus (2) for constructing a thin film mirror, which apparatus (2) comprises a suction chamber (4), first attachment means (6) positioned at a first side (8) of the suction chamber (4) and for attaching the thin film (10) to the first side (8) of the suction chamber (4), and second attachment means (12) positioned at a second and opposite side (14) of the suction chamber (4) and for attaching the thin film (10) to the second side (14) of the suction chamber (4), the first and second attachment means (6, 12) being such that they secure the thin film (10) against movement when tension is applied in a first direction extending between the first and second attachment means (6, 12), and the first and second attachment means (6, 12) being such that they allow the thin film (10) to move and stretch in a second direction which is at right angles to the first direction and which allows the thin film (10) to be distorted to a desired geometric shape for forming the thin mirror.